

Notice of Allowability

Application No.

09/382,677

Examiner

Henry N. Tran

Applicant(s)

HIROKI, MASAAKI

Art Unit

2629

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the amendment received 5/24/06.
2. ☒ The allowed claim(s) is/are 2-4, 8-11, 13, 16 and 20-34; and are renumbered as 1-24.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some* c) ☐ None of the:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

Henry N. Tran

HENRY N. TRAN
PRIMARY EXAMINER

7/21/06

DETAILED ACTION

The Amendment received May 24, 2006 has been entered. Claims 2-4, 8-11, 13, 16 and 20-34 remain pending in this application. Applicant's Remarks/Arguments, see pages 7-12 of the Amendment, with respect to the rejections of the based claims 2 and 13 have been fully considered and are persuasive. The rejection of the claims recited in the prior Office action mailed March 20, 2006 has been withdrawn.

Allowable Subject Matter

1. Claims 2-4, 8-11, 13, 16 and 20-34 are allowed; and are renumbered as 1-24.
2. The following is an examiner's statement of reasons for allowance:

The present invention is directed to methods and apparatus for driving a display device. The independent method claim 2 requires the steps of: performing sampling and A/D conversion on an analog signal on the basis of the modulated clock signal, and after performing digital processing on the digital image signal, performing D/A conversion on the digital image on the basis of the reference clock signal; the independent method claim 3 requires the steps of: performing sampling and A/D conversion on an analog signal on the basis of a reference clock signal, and after performing digital processing on the digital image signal, performing D/A conversion on the digital image on the basis of a modulated clock signal; the independent apparatus claim 13 requires: a first modulated clock signal, a second modulated clock signal, and the digital image signal which is inputted to a source signal line-side driving circuit is converted to an analog image signal by D/A conversion on the basis of said first modulated clock signal; and the independent method claim 30 requires the steps of: supplying the improved analog image

Art Unit: 2629

signal to a source signal line, wherein at least two gate signal lines are selected at the same time when the improved analog signal is inputted to the source signal line; whereas, the closest prior art, the Eglit patent (U.S. Patent No. 6,320,574), the Shigeta patent (U.S. Patent No. 6,657,640), and Sato (U.S. Patent No. 5,940,061), which disclose conventional methods and apparatuses for driving display devices, either singularly or in combination, fail to teach or suggest the claimed invention.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

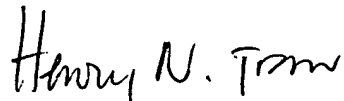
Conclusion

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Henry N. Tran whose telephone number is 571-272-7760. The examiner can normally be reached on M-F 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bipin H. Shalwala, can be reached on 571-272-7681. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2629

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Henry N Tran
Primary Examiner
Art Unit 2629

HT
7/31/06